



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/619,827

07/20/2000

Yang Cao

Cao-21

3535

7590

03/08/2005

HARNESS, DICKEY & PIERCE  
P.O. BOX 8910  
RESTON, VA 20195

EXAMINER

LY, ANH VU H

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/619,827

Applicant(s)

CAO ET AL.

Examiner

Anh-Vu H Ly

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3-11 and 13-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-11 and 13-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This communication is in response to applicant's amendment filed January 28, 2005.

Claims 1, 3-11, and 13-32 are pending.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3-11, and 13-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimbashi et al (US Patent No. 6,798,779 B1). Hereinafter, referred to as Shimbashi.

With respect to claims 1, 11, 20, and 27, Shimbashi discloses in Fig. 4, an integrated node comprises VT switching module 24 (one or more circuit switch fabrics) and ATM switching module 25 (one or more packet switch fabrics). Shimbashi discloses in Figs. 6 and 7, diagrams explaining how the data frame (STS, ATM, and LAN packets) changes at each point in the configuration shown in Fig. 5. Herein, overhead information is extracted and data frames are either directed to the VT switching module or ATM switching module (a controller configured to examine traffic overhead information to determine which of switch fabric types to route the traffic to and to route telecommunications traffic to one or the other of circuit or packet switch fabrics upon making a determination).

With respect to claims 3, 13, 20, and 27, Shimbashi discloses in Fig. 6, the overhead information includes SONET frame overhead signal (wherein the overhead information is a SONET/SDH path overhead byte).

With respect to claims 4, 14, 20, and 27, Shimbashi discloses in Fig. 18, SONET frame includes SOH, LOH, and POH. Herein, C2 overhead byte is part of the overhead information (wherein the overhead byte is a C2 overhead byte).

With respect to claims 5-6 and 21-22, Shimbashi discloses in Fig. 4, an integrated node comprises VT switching module 24 (wherein the circuit switch fabric is a STS cross connect) and ATM switching module 25 (wherein the packet switch fabric is configured to switch IP or ATM traffic).

With respect to claims 7 and 23, Shimbashi discloses in Fig. 4, the integrated node comprises VT switching module 24, ATM switching module 25, spare VT switching module 24', and spare ATM switching module 25' (a plurality of circuit switch fabrics).

With respect to claims 8 and 24, Shimbashi discloses in Figs. 6 and 7, diagrams explaining how the data frame changes at each point in the configuration shown in Fig. 5. Herein, overhead information is extracted and data frames are either directed to the VT switching module or ATM switching module (wherein the controller is configured to examine a path

Art Unit: 2667

overhead byte associated with received traffic and to thereby determine whether the traffic is ATM, IP, or STM traffic).

With respect to claims 9, 18, 25, and 31, Shimbashi discloses in Fig. 7, STS-12 comprises ATM cell mapping (wherein the controller is configured to dynamically allocated circuit switch resources to ATM traffic to route the traffic to a packet switch fabric for switching).

With respect to claims 10, 19, 26, and 32, Shimbashi discloses in Fig. 6, LAN packets are converted to ATM cells. Further, Shimbashi discloses in Fig. 7, STS-12 comprises ATM cell mapping (wherein the controller is configured to dynamically allocate circuit switch resources to IP traffic to route the traffic to a packet switch fabric for switching).

With respect to claims 15-16 and 28-29, Shimbashi discloses in Fig. 4, that ATM traffic and LAN traffic are directed to the ATM switching module 25 (the controller directing ATM traffic and IP traffic to a packet switch fabric).

With respect to claims 17 and 30, Shimbashi discloses in Fig. 4, that STM traffic is directed to VT switching module 24 (the controller directing traffic that is neither ATM or IP traffic to the circuit switch fabric).

### ***Response to Arguments***

3. Applicant's arguments filed January 28, 2005 have been fully considered but they are not persuasive.

Applicant argues on page 8 that Shimbashi does not disclose or suggest the examination of traffic overhead information to determine whether to route traffic to a circuit switch fabric or a packet switch fabric. Examiner respectfully disagrees. First of all, Shimbashi discloses in Figs 3 and 4, an integrated node including both STM and ATM switch capabilities. Further, Shimbashi discloses in Figs. 6 and 7, diagrams explaining how the data frame (STS, ATM, and LAN packets) changes at each point in the configuration as shown in Fig. 5. Herein, overhead information is extracted and data frames are either directed to the VT switching module or ATM switching module (a controller configured to examine traffic overhead information to determine whether to route traffic to a circuit switch fabric or a packet switch fabric).

Applicant further argues and assumes on page 9 that the centralized control module 32 is only responsible for sending signals to either the active STS switching module or the spare STS switching module when a fault is detected. Examiner respectfully agrees. However, there is more than one operation being performed by the centralized control module. Such as controlling and directing the inputted signals to the correct switching fabrics as shown in Figs. 4-10.

Applicant further argues on page 9 that there is no disclosure that the switching is based on an examination of traffic overhead information, much less the C2 overhead byte. Examiner respectfully disagrees. Shimbashi discloses in Fig. 18, SONET frame includes SOH, LOH, and POH. Herein, C2 overhead byte is part of the overhead information (wherein the overhead byte is a C2 overhead byte).

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600 2/20/05